

What is claimed is:

1. A receiver of a spread spectrum communication system comprising:
a plurality of despreading circuits for despreading received signals having multipath components at predetermined timing allocated thereto;

a rake circuit for performing rake combining of the signals despread by despreading
5 circuits; and

a path searcher which forms a first window showing a part of a search range and calculates delay profile data of said received signals in said first window to search an effective path, forms at least one second window in the search range except said first window and calculates delay profile data of said received signals in said second window,
10 and detects timing at which said received signals are despread based on calculated delay profile data to allocate the detected timing to said despreading circuits.

2. The receiver of the spread spectrum communication system according to claim 1, wherein said path searcher forms a plurality of second windows by dividing the search range except said first window to calculate said delay profile data in said respective second windows in accordance with a predetermined order.

3. The receiver of the spread spectrum communication system according to claim 2, wherein said path searcher is supplied with a peak position information from a peak position estimation circuit which performs rough estimation of a peak position of the delay profile, and said path searcher sets the center of said first window at a timing at
5 which the peak position appears.

4. The receiver of the spread spectrum communication system according to claim 2, wherein said path searcher forms said second windows in only one of areas which interpose said first window therebetween.

5. The receiver of the spread spectrum communication system according to claim 2, wherein said path searcher forms said second windows in both areas which

interpose said first window therebetween.

6. The receiver of the spread spectrum communication system according to claim 2, wherein said path searcher forms two second windows and alternately specifies said second window repeatedly and said path searcher calculate delay profile with the specified second windows.

7. A path search method of a spread spectrum communication system comprising:

receiving signals including multipath components;

forming a first window showing a part of a predetermined search range to search an
5 effective path;

calculating first delay profile data representing a delay profile of received signals,
in the first window to search an effective path;

forming at least one second window in the search range except said first window;

calculating second delay profile data representing a delay profile of the received
10 signals in the second window to search an effective path ; and

detecting timing at which despreading said received signals based on calculated
first and second delay profile data.

8. The path search method according to claim 7, wherein

said second window forming step includes forming a plurality of second windows
by dividing the search range except said first window, and

said second profile data calculating step includes calculating said delay profile data
5 in said respective second windows in accordance with a predetermined order.

9. The path search method according to claim 8, further comprising performing
rough estimation of the delay profile of the received signal; and

setting center of the first window at a timing at which roughly calculated peak
position appear.

10. The path search method according to claim 8, wherein said second windows are formed in only one of areas which interpose said first window therebetween.

11. The path search method according to claim 8, wherein said second windows are formed in both areas which interpose said first window therebetween.

12. The path search method according to claim 8, wherein
said second window forming step forms two second windows, and
said second profile data calculating step alternately specifies the two second
windows repeatedly, and calculates the second delay profile data with the specified
5 second windows.

Year	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	